

AMENDMENTS TO THE DRAWINGS

The attached sheet of drawings includes changes to Figure 13. This sheet, which includes Figure 13, replaces the original sheet including Figure 13. Figure 13 has been re-drawn to make Figure 13 easier to read.

Attachment: Replacement Sheet

REMARKS

This application has been carefully reviewed in light of the Office Action of July 18, 2006, wherein:

- A. Figure 13 was objected to because of minor informalities;
- B. Claim 22 was objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claims 19 and 21.
- C. Claims 16-18, 20-21, and 23-32 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,178,440 to Foster et al. and in view of U.S. Patent No. 5,596,774 to Dao et al.; and
- D. Claim 19 was objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Drawing Objections

- A. Figure 13 was objected to because of minor informalities. Specifically, the Examiner stated that Figure 13 is dark and blurry and therefore hard to read. The Applicants have submitted new Figure 13 in response to the Examiner's objections.

Claim Rejections – under 37 CFR 1.75(c)

- B. Claim 22 was objected to under 37 CFR 1.75(c) as being in improper form because multiple dependent claims 19 and 21. The Applicants have amended Claim 22 to recite “claims 19 or 21.” The Applicants submit that this claim amendment places the claims in proper multiple dependent form. Further, the Applicants submit that this claim amendment does not change the scope of the claim.

Claim Rejections – under 35 USC 103(a)

- C. Claims 16-18, 20-21, and 23-32 were rejected under 35 USC 103(a) as being unpatentable over U.S. Patent No. 6, 178,440 to Foster et al., herein referred to as the “Foster patent” in view of U.S. Patent No. 5,596,774 to Dao et al., herein referred to as the “Dao patent.”

Claim 16

On page 4 of the Office Action, the Examiner rejected Claim 16 stating “Foster teaches a method of a container comprising a plurality of data objects and an association of the plurality of data objects with a plurality of physical resources in the network assigned to the container at which the container may be stored or copied (column 7, lines 34-40), comprising: issuing a request relating to one or more data object in a container in response to a user command; accessing a catalog in response to the request, the catalog associating the data objects in the container with the plurality of physical resources assigned to the container; copying a container from one physical resource to another assigned to the container transparently to the user should a staging condition arise; synchronizing multiple copies, or marking for synchronization at least one copy, of a container transparently to the user should an out-of-synchronization condition arise; and updating the catalog to reflect changes incidental to the request (column 6, line 9-column 7, line 55).” The Examiner further stated that the Foster patent “does not explicitly teach transparently managing containers in a network of distributed physical resources and maintaining a meta-data catalog as claimed.” However, the Examiner asserted “Dao teaches in transparent integrated access to heterogeneous database management system a Smart Data Dictionary (SDD) server contains meta-data information and maintaining a catalog (Dao: column 10, lines 25-44 and column 11, lines 9-23).” The Examiner concluded that “[i]t would have been obvious to a person of ordinary skill in the art at the time of the invention was made to combine the teachings of Dao with the teachings of Foster to provide a system which would be extensible and flexible for providing users with transparent integrated access to heterogeneous DBMS dispersed over a long haul network (Dao: column 1, lines 12-16). The Applicants respectfully disagree with the conclusions drawn by the Examiner.

1. *The Foster patent does not teach, disclose, or suggest “copying a container from one physical resource to another assigned to the container” as is claimed in Claim 16.*

As noted by MPEP 2143.03 to establish a *prima facie* case of obviousness, all the claim limitations must be taught or suggested by the prior art. The Applicants submit that the Foster patent does not teach, disclose, or suggest “copying a container from one physical location to another assigned to the container,” as is claimed in Claim 16.

In rejecting Claim 16, the Examiner referred to col. 6, line 9 through column 7, line 55 of the Foster patent as teaching, among other things, “copying a container from one physical resource to another assigned to the container.” The Examiner did not indicate how the Examiner is interpreting the language of the Foster patent. The Applicants find no reference to “physical resources” or “copying a container from one physical resource to another assigned to the container” in the cited portions of the Foster patent. If the Examiner continues to maintain the rejection, the Applicants respectfully request that the Examiner explain to the Applicants what exact language in the Foster patent the Examiner believes teaches “copying a container from one physical resource to another assigned to the container.”

Further, the Applicants submit that the Foster patent does not teach, disclose, or suggest “copying a container from one physical resource to another assigned to the container,” as is claimed in Claim 16. The Foster patent discusses a “container object” as it refers to an object that can have other “objects” contained within it as is common in object-oriented programming. Foster patent, col. 7, lines 30-44. The Foster patent discloses creating and destructing container objects, but not “copying a container from one physical resource to another assigned to the container,” as is claimed in Claim 16. Foster patent, col. 7, lines 45-55. Additionally, the Foster patent discloses that the use of “container objects” allows the ORB to lock the requested server object. Foster patent, col. 7, lines 16-18; also col. 9, lines 39-44. An example of how the system disclosed in the Foster patent is used is explained in col. 9, line 4 through col. 10, line 30. In this example, a client wishes to withdraw \$200 from his checking account. Before the client can withdraw the \$200, the bank needs to check the current balance. “Current balance” is an object within “account no. 45” (the client’s checking account). The system disclosed in the Foster patent uses the “container object,” “account no. 45,” to lock access to “current balance,” so that the bank can determine if there is enough money in the account, provide the client with his \$200, update “current balance,” and then release the lock. Locking object “current balance” prevents later received requests from conflicting with the prior received requests. The Applicants do not find the limitation of “copying a container from one physical resource to another assigned to the container” anywhere during this process. The Applicants respectfully request that if the Examiner believes “copying a container from one physical resource to another assigned to the container” is taught, disclosed, or suggested in the Foster patent that the Examiner explain how the Examiner is interpreting the Foster patent to teach this limitation.

Additionally, the Applicants understand that the “container object” of the Foster patent is an object stored at the server. The Applicants submit that the Foster patent does not teach, disclose, or suggest that “a plurality of physical resources in the network are assigned to the container.” In rejecting claim 16, the Examiner referred to column 7, lines 34-40 of the Foster patent as teaching “a container comprising a plurality of data objects and an association of the plurality of data objects with a plurality of physical resources in the network assigned to the container at which the container may be stored or copied.” The Examiner did not indicate how the Examiner is interpreting the language of the Foster patent. For example, the Examiner indicates that in column 7, lines 34-40 that the Foster patent teaches “an association of the plurality of data objects with a plurality of physical resources.” However, in the portion of the Foster patent cited by the Examiner, the Applicants find no reference to “physical resources” or “an association of the plurality of data objects with a plurality of physical resources in the network assigned to the container at which the container may be stored or copied.”

If the Foster patent does not teach, disclose, or suggest that “a plurality of physical resources in the network are assigned to the container,” then the Applicants submit that the Foster patent cannot teach, disclose, or suggest “copying a container from one physical resource to another assigned to the container,” as is claimed in Claim 16. If the Examiner continues to maintain the rejection, the Applicants respectfully request that the Examiner explain to the Applicants what exact language in the Foster patent the Examiner believes teaches “physical resources” and “an association of the plurality of data objects with a plurality of physical resources in the network assigned to the container at which the container may be stored or copied.”

2. *The Foster patent does not teach, disclose, or suggest “synchronizing multiple copies, or marking for synchronization at least one copy of a container ... should an out-of-synchronization condition arise,” as is claimed in Claim 16.*

As explained above, the Applicants submit that the Foster patent does not teach, disclose, or suggest “copying a container from one physical resource to another assigned to the container,” as is claimed by Claim 16. Without a copy, the Applicants submit that there cannot be a “synchroniz[ation] of multiple copies, or marking for synchronization at least one copy of a container.”

Additionally, the Applicants submit that that the Foster patent does not teach, disclose, or suggest this limitation. In rejecting this claim element, the Examiner referred to col. 6, line 9 – col. 7, line 55 as teaching, among other things, “synchronizing multiple copies, or marking for synchronization at least one copy of a container ... should an out-of-synchronization condition arise.” The Applicants note that the Foster patent is a method for performing concurrency control. *See Foster patent, Abstract.* The system disclosed in the Foster patent includes an object request broker (ORB) which prevents conflict between two transactions attempting to access the same data. For example, if a first request belonging to one transaction “is trying to examine the contents of a server object’s encapsulated data, a later request belonging to another transaction should not be allowed to alter this data while the first request is still examining the data.” Foster patent, col. 5, lines 47-50. When processing a request, the ORB determines if the data to be accessed is currently locked, and if not, the ORB will lock the data to prevent any interference by subsequent requests. *See Figures 2a and 2b of the Foster patent.* Because of this ability to lock access, there would be no out-of-synchronization condition, thus there would be no “synchronizing multiple copies, or marking for synchronization at least one copy of a container ... should an out-of-synchronization condition arise,” as is claimed in Claim 16. If the Examiner continues to maintain this rejection, the Applicants respectfully request that the Examiner explain how the Examiner is interpreting the Foster patent to teach this limitation.

3. *There is no motivation to combine the teachings of the Dao patent with the teachings of the Foster patent.*

As stated in the MPEP 706.02(j), “[t]o establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant’s disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

The Applicants submit that there is no motivation to combine the teachings of the Dao patent and the Foster patent. The Foster patent is directed toward performing concurrency control on work requests. *See* Foster patent, Abstract. The example used through out the Foster patent is two different ATMs (client machines), on two different networks, being used to access a single checking account. *See* col. 3, lines 34-42. The system disclosed in the Foster patent locks access to data on the server in response to a request from one client to prevent a second request (typically from another client) from interfering with the first request. *See* discussion of the Foster patent *supra*. The computer system disclosed in the Foster patent is a distributed computing system, where one computing device (the client) requests another computing device (the server) to perform part of the client's work. Foster patent, col. 1, lines 10-15. In the system disclosed in the Foster patent, all of the data is located on a single server, and multiple clients are attempting to access the data. In contrast, the Dao patent is related to a different type of computer system. The system disclosed in the Dao patent is designed to "access data from multiple Regional Database Management Systems." Dao patent, col. 5, lines 60-61. Thus, in the system disclosed in the Dao patent there are multiple clients attempting to access data that is located on multiple servers, wherein one server may have one portion of the data, while another server has a different portion of the data requested. *See* Dao patent, col. 1, line 40 through col. 2, line 7.

The Applicants submit that there is no motivation to combine these references as they are directed to two entirely different computer systems. The Examiner stated that "it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Dao with the teachings of Foster to provide a system which would be extensible and flexible for providing users with transparent integrated access to heterogeneous DBMS dispersed over a long haul network." The Applicants respectfully disagree.

As stated above, the Foster patent is not directed toward a heterogeneous DBMS dispersed over a long haul network. In fact, the Applicants submit that nowhere in the Foster patent does it suggest that the data located on the server be dispersed over a long haul network. The Foster patent is concerned with controlling access by more than one client to a single server. There is no need described in Foster to distribute the data in the single server to multiple servers.

Additionally, the Dao patent teaches that the motivation to providing an extensible and flexible system that provides users with transparent integrated access to heterogeneous DBMS dispersed over a long haul network is because “large scale organizations and environments have initially adopted heterogeneous and incompatible information systems in an uncoordinated way.” The Foster patent does not address a system where the data is being stored on heterogeneous and incompatible information systems in an uncoordinated way. The Applicants submit that there is no motivation found in either the Dao patent or the Foster patent which would lead a person skilled in the art to combine these references as they are directed to different solutions for completely different computer network architectures.

For the reasons given above, the Applicants submit Claim 16 is patentable over the cited prior art.

Claims 17-32

For the reasons given above, the Applicants submit that Claim 16 is patentable over the cited prior art. Claims 17-32 depend on Claim 16. Therefore, the Applicants submit that Claims 17-32 are patentable over the cited prior art at least through their dependence upon an allowable base claim.

Allowable Subject Matter

D. Claim 19 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The Applicants thank the Examiner for the acknowledgement of the allowable subject matter of Claim 19.

Concluding Remarks:


For all the foregoing reasons, reconsideration of and withdrawal of all outstanding rejections is respectfully requested. The Examiner is earnestly solicited to allow all claims, and pass this application to issuance.

The Applicants believe that no fees are owed in connection with this response. However, if any additional fee is in fact owing that is otherwise not accounted for, the Commissioner is hereby authorized to charge Deposit Account No. **08-3038**, (referencing Docket No. **02737.0003.DVUS01**) for the requisite fee. Additionally, if further extensions of time are required, the Commissioner is authorized to treat this response as including a petition to extend the time period pursuant to 37 CFR 1.136(a) requesting an extension of time of the number of months necessary to make this response timely filed. The petition fee due in connection therewith may be charged to deposit account no. 08-3038.

To expedite allowance of this case, the Examiner is earnestly invited to call the undersigned at (949) 759-5269.

Respectfully submitted,

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